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PTO/SB/05 (06-03)

# UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.

036021.0001

First Inventor

Sam-Shajing Sun

Title

A Photovoltaic Device Based on  
Conjugated Block Copolymers

Express Mail Label No.

ER 305276632 US

## APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

ADDRESS TO:

Mail Stop Patent Application  
Commissioner for Patents  
P.O. Box 1450  
Alexandria VA 22313-1450

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)  
(Submit an original and a duplicate for fee processing)
2. ☒ Applicant claims small entity status.  
See 37 CFR 1.27.
3. ☒ Specification [Total Pages 35]  
(preferred arrangement set forth below)
  - Descriptive title of the invention
  - Cross Reference to Related Applications
  - Statement Regarding Fed sponsored R & D
  - Reference to sequence listing, a table,  
or a computer program listing appendix
  - Background of the Invention
  - Brief Summary of the Invention
  - Brief Description of the Drawings (if filed)
  - Detailed Description
  - Claim(s)
  - Abstract of the Disclosure
4. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets 7]
5. Oath or Declaration [Total Sheets 2]
  - a. ☒ Newly executed (original or copy)
  - b. ☐ Copy from a prior application (37 CFR 1.63(d))  
(for continuation/divisional with Box 18 completed)
  - i. ☐ **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s)  
name in the prior application, see 37 CFR  
1.63(d)(2) and 1.33(b).
6. ☐ Application Data Sheet. See 37 CFR 1.76

7. ☐ CD-ROM or CD-R in duplicate, large table or  
Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission  
(if applicable, all necessary)
  - a. ☐ Computer Reader Form (CRF)
  - b. Specification Sequence Listing on:
    - i. ☐ CD-ROM or CD-R (2 copies); or
    - ii. ☐ Paper
  - c. ☐ Statements verifying identity of above copies

## ACCOMPANYING APPLICATION PARTS

9. ☐ Assignment Papers (cover sheet & document(s))
10. ☐ 37 CFR 3.73(b) Statement ☒ Power of  
(when there is an assignee) Attorney
11. ☐ English Translation Document (if applicable)
12. ☒ Information Disclosure ☒ Copies of IDS  
Statement (IDS)/PTO-1449 Citations
13. ☐ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503)  
(Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s)  
(if foreign priority is claimed)
16. ☐ Nonpublication Request under 35 U.S.C. 122  
(b)(2)(B)(i). Applicant must attach form PTO/SB/35  
or its equivalent.
17. ☒ Other: Auth. to charge deposit acct. in duplicate

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.: .....

Prior application information:

Examiner

Art Unit:

For CONTINUATION OF DIVISIONAL APPS only; The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

## 19. CORRESPONDENCE ADDRESS

☒ Customer Number:  OR ☐ Correspondence address below

Name Kimberly A. Chasteen

22467

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Williams Mullen

PATENT TRADEMARK OFFICE

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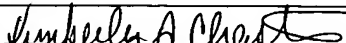
Name (Print/Type)

Kimberly A. Chasteen

Registration No. (Attorney/Agent)

36.755

Signature



Date

11/14/03

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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U.S. PTO  
10/714230



111403

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**FEE TRANSMITTAL  
for FY 2003**

Effective 01/01/2003. Patent fees are subject to annual revision.

☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT

(\$) 394.00

**Complete if Known**

Application Number

Filing Date

11/14/03

First Named Inventor

Sam-Shajing Sun

Examiner Name

Art Unit

Attorney Docket No.

036021.0001

**METHOD OF PAYMENT (check all that apply)**☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None☒ Deposit Account:Deposit  
Account  
Number  
Deposit  
Account  
Name

50-0766

Williams Mullen

The Director is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☐ Credit any overpayments☒ Charge any additional fee(s) during the pendency of this application☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.**FEE CALCULATION****1. BASIC FILING FEE**

| Large Entity |          | Small Entity |          | Fee Description        | Fee Paid |
|--------------|----------|--------------|----------|------------------------|----------|
| Fee Code     | Fee (\$) | Fee Code     | Fee (\$) |                        |          |
| 1001         | 750      | 2001         | 375      | Utility filing fee     | 385.00   |
| 1002         | 330      | 2002         | 165      | Design filing fee      |          |
| 1003         | 520      | 2003         | 260      | Plant filing fee       |          |
| 1004         | 750      | 2004         | 375      | Reissue filing fee     |          |
| 1005         | 160      | 2005         | 80       | Provisional filing fee |          |

SUBTOTAL (1) (\$) 385.00

**2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE**

| Total Claims       |           | Extra Claims |     | Fee from below | Fee Paid |
|--------------------|-----------|--------------|-----|----------------|----------|
|                    |           |              |     |                |          |
| 21                 | -20** = 1 | X 9          | = 9 |                |          |
| Independent Claims |           | -3** =       | X   |                |          |
| Multiple Dependent |           |              | X   |                |          |

| Large Entity |          | Small Entity |          | Fee Description  | Fee Paid |
|--------------|----------|--------------|----------|--|----------|
| Fee Code     | Fee (\$) | Fee Code     | Fee (\$) |  |          |
| 1202         | 18       | 2202         | 9        | Claims in excess of 20                                     |          |
| 1201         | 84       | 2201         | 42       | Independent claims in excess of 3                          |          |
| 1203         | 280      | 2203         | 140      | Multiple dependent claim, if not paid                      |          |
| 1204         | 84       | 2204         | 42       | ** Reissue independent claims over original patent         |          |
| 1205         | 18       | 2205         | 9        | ** Reissue claims in excess of 20 and over original patent |          |

SUBTOTAL (2) (\$) 9

\*\*or number previously paid, if greater; For Reissues, see above

**FEE CALCULATION (continued)****3. ADDITIONAL FEES**

Large Entity Small Entity

| Fee Code | Fee (\$) | Fee Code | Fee (\$) | Fee Description  | Fee Paid |
|----------|----------|----------|----------|--|----------|
| 1051     | 130      | 2051     | 65       | Surcharge - late filing fee or oath  |          |
| 1052     | 50       | 2052     | 25       | Surcharge - late provisional filing fee or cover sheet                     |          |
| 1053     | 130      | 1053     | 130      | Non-English specification  |          |
| 1812     | 2,520    | 1812     | 2,520    | For filing a request for ex parte reexamination                            |          |
| 1804     | 920*     | 1804     | 920*     | Requesting publication of SIR prior to Examiner action                     |          |
| 1805     | 1,840*   | 1805     | 1,840*   | Requesting publication of SIR after Examiner action                        |          |
| 1251     | 110      | 2251     | 55       | Extension for reply within first month                                     |          |
| 1252     | 410      | 2252     | 205      | Extension for reply within second month                                    |          |
| 1253     | 930      | 2253     | 465      | Extension for reply within third month                                     |          |
| 1254     | 1,450    | 2254     | 725      | Extension for reply within fourth month                                    |          |
| 1255     | 1,970    | 2255     | 985      | Extension for reply within fifth month                                     |          |
| 1401     | 320      | 2401     | 160      | Notice of Appeal   |          |
| 1402     | 320      | 2402     | 160      | Filing a brief in support of an appeal                                     |          |
| 1403     | 280      | 2403     | 140      | Request for oral hearing   |          |
| 1451     | 1,510    | 1451     | 1,510    | Petition to institute a public use proceeding                              |          |
| 1452     | 110      | 2452     | 55       | Petition to revive - unavoidable   |          |
| 1453     | 1,300    | 2453     | 650      | Petition to revive - unintentional   |          |
| 1501     | 1,300    | 2501     | 650      | Utility issue fee (or reissue)   |          |
| 1502     | 470      | 2502     | 235      | Design issue fee   |          |
| 1503     | 630      | 2503     | 315      | Plant issue fee  |          |
| 1460     | 130      | 1460     | 130      | Petitions to the Commissioner  |          |
| 1807     | 50       | 1807     | 50       | Processing fee under 37 CFR 1.17(q)  |          |
| 1806     | 180      | 1806     | 180      | Submission of Information Disclosure Stmt                                  |          |
| 8021     | 40       | 8021     | 40       | Recording each patent assignment per property (times number of properties) |          |
| 1809     | 750      | 2809     | 375      | Filing a submission after final rejection (37 CFR 1.129(a))                |          |
| 1810     | 750      | 2810     | 375      | For each additional invention to be examined (37 CFR 1.129(b))             |          |
| 1801     | 750      | 2801     | 375      | Request for Continued Examination (RCE)                                    |          |
| 1802     | 900      | 1802     | 900      | Request for expedited examination of a design application                  |          |

Other fee (specify)

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$)

**SUBMITTED BY**

(Complete if applicable)

|                   |                             |                                   |          |           |              |
|-------------------|-----------------------------|-----------------------------------|----------|-----------|--------------|
| Name (Print/Type) | Kimberly A. Chasteen        | Registration No. (Attorney/Agent) | 36,755   | Telephone | 757-249-7102 |
| Signature         | <i>Kimberly A. Chasteen</i> | Date                              | 11/14/03 |           |              |

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

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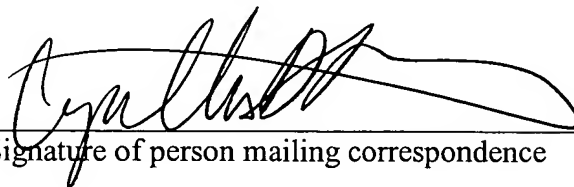
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"Express Mail" label number

11/14/03

Date of Deposit

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Cynthia D. Parrish

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
APPLICATION FOR UTILITY PATENT

Applicant: Sam-Shajing Sun

Filing Date:

Title: A Photovoltaic Device Based on Conjugated Block Copolymers

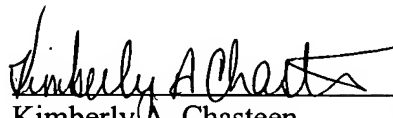
Attorney Docket No.: 036021.0001

To the Commissioner of Patents and Trademarks  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Authorization to Charge Deposit Account Pursuant to 37 CFR 1.25

Please charge the filing fee under 37 CFR 1.16 of the above referenced Patent  
Application under 35 USC 111 application to USPTO Deposit Account Number  
50-0766.

Authorized Signatory:

 14 Nov 03  
Kimberly A. Chasteen Date  
Reg. No. 36,755

This Authorization is submitted in duplicate.

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